DETAILED ACTION

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Harrelson on 11/5/2009.

The application has been amended as follows:

Cancel claim 14.

In claim 15, line 2 of the claim, delete "bioresorbable" and replace with --bioresorbable.--.

Cancel claim 55.

Cancel claim 64.

In claim 70, line 1 of the claim, delete "The polymersome of claims 55" and replace with --The polymersome of claim 52--.

In claim 74, line 1 of the claim, delete "The polymersome of claim 55" and replace with --The polymersome of claim 52--.

In claim 75, line 1 of the claim, delete "The polymersome of claim 55" and replace with --The polymersome of claim 52--.

In claim 77, line 1 of the claim, delete “The polymersome of claim 56” and replace with --The polymersome of claim 76--.

In claim 107, line 11 of the claim, delete “individually;” and replace with --individually; wherein said emissive agent comprises at least two porphyrin moieties, said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

Cancel claim 109.

In claim 111, line 1 of the claim, delete “The method of claim 109” and replace with --The method of claim 107--.

Cancel claims 112-116.

In claim 131, line 12 of the claim, delete “individually;” and replace with --individually; wherein said emissive agent comprises at least two porphyrin moieties, said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

Cancel claim 133.

In claim 134, line 1 of the claim, delete “The method of claim 133” and replace with --The method of claim 131--.

Cancel claims 136-140.

In claim 152, line 1 of the claim, delete “The method of claim 133” and replace with --The method of claim 131--.

In claim 153, line 11 of the claim, delete “individually;” and replace with --individually; wherein said emissive agent comprises at least two porphyrin moieties,

said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

Cancel claim 155.

In claim 156, line 1 of the claim, delete “The method of claim 155” and replace with --The method of claim 153--.

In claim 158, line 1 of the claim, delete “The method of claim 155” and replace with --The method of claim 153--.

In claim 165, line 1 of the claim, delete “The method of claim 155” and replace with --The method of claim 153--.

In claim 166, line 12 of the claim, delete “individually;” and replace with -- individually; wherein said emissive agent comprises at least two porphyrin moieties, said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

In claim 170, line 14 of the claim, delete “individually;” and replace with -- individually; wherein said emissive agent comprises at least two porphyrin moieties, said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

In claim 172, line 2 of the claim, delete “agent comprising at least two covalently bound moieties” and replace with --agent, wherein said emissive agent emits light in the 700-1100 nm spectral regime and wherein said emissive agent is an emissive conjugated compound comprising at least two covalently bound moieties; whereby upon exposing said compound to an energy source for a time and under conditions effective

to cause said compound to emit light that at a wavelength between 700-1100 nm, and exhibits an integral emission oscillator strength that is greater than the emission oscillator strength manifest by either one of the said moieties individually; wherein said emissive agent comprises at least two porphyrin moieties, said porphyrin moieties being linked by a hydrocarbon bridge comprising at least one unsaturated moiety;--.

Cancel claim 176 and 177.

Cancel claim 179.

Examiner's Statement of Reasons for Allowance

The following is an examiner's statement of reasons for allowance: the closest prior art is considered to be Lee et al. (Biotech. and Bioeng., 2001, 73, 135-145), which teaches polymersome vesicles incorporating LAURDAN. However, the Lee article does not teach or suggest using such vesicles as contrast agents for optical imaging and does not teach porphyrin conjugated via unsaturated hydrocarbon as an emissive agent. The Klaveness (US 6,159,445) and Unger (6,123,923) patents provide a general teaching of vesicles comprising emissive agents used for optical imaging, but both provide a long list of suitable agents and vessicle materials, with no preference for porphyrin or amphiphilic copolymeric vesicles. Neither provides a teaching for using porphyrin conjugated via unsaturated hydrocarbon as an emissive agent.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leah Schlientz whose telephone number is (571)272-9928. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday 9 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618

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